implants may also be made by using the net-shape manufacturing process as owned by Zimmer Trabecular Metal Technologies, Inc.

While this invention may have been described as having a preferred design, the present invention can be further modified within the spirit and scope of this disclosure. This application is therefore intended to cover any variations, uses, or adaptations of the invention using its general principles. Further, this application is intended to cover such departures from the present disclosure as come within known or customary practice in the art to which this invention pertains and which fall within the limits of the appended claims.

What is claimed is:

1. A bone implant comprising:

a coronal member formed of a relatively rigid coronal member material and defining an apical end surface;

an apical member formed of a relatively rigid apical member material and defining a ledge, the apical member configured to adjustably engage the coronal member to define a space between the apical end surface and the ledge; and

a porous member formed of a relatively flexible porous member material that is at least partially porous, the porous member being removably positionable between the apical end surface of the coronal member and the ledge of the apical member, such that adjusting the coronal member and the apical member toward each other longitudinally compresses the porous member and expands the porous member generally radially outward.

2. The bone implant of claim **1**, in which the coronal member is configured to threadably engage the apical member.

3. The bone implant of claim **1**, in which the coronal member comprises a smooth exterior surface.

4. The bone implant of claim **1**, in which the apical member comprises a smooth exterior surface.

5. The bone implant of claim **1**, in which the porous member material comprises a porous metal.

6. The bone implant of claim **1**, in which the porous member material comprises tantalum.

7. The bone implant of claim **1**, in which at least one of the coronal member and the apical member includes a core, and in which the porous member has a cylindrical profile defining a longitudinal cavity configured to receive the core.

8. The bone implant of claim **1**, in which the porous member material has a compressive strength in a range of approximately 50 to 90 MPa.

9. The bone implant of claim **1**, in which the porous member material has a stiffness of approximately 3 Gpa or less.

10. The bone implant of claim **1**, in which the coronal member further includes a coronally accessible cavity configured to receive a portion of a driving tool.

11. The bone implant of claim **1**, in which the porous member comprises a generally cylindrical wall having a thickness of approximately 0.020 to 0.040 inches.

12. A dental bone implant for use with a bore formed in a dentition site, the dental bone implant comprising:

a coronal member formed of a relatively rigid coronal member material, the coronal member including an apical end surface;

an apical member formed of a relatively rigid apical member material and defining a ledge, wherein a space is defined between the apical end surface of the coronal member and the ledge of the apical member;

a core extending between the coronal member and the apical member, the core being configured to adjustably engage at least one of the coronal member and the apical member; and

a porous member formed of a relatively flexible porous member material that is at least partially porous, the porous member having a generally hollow, cylindrical shape configured to receive the core, the porous member being disposed in the space between the apical end surface of the coronal member and the ledge of the apical member;

wherein the core is adjustable along a longitudinal direction to longitudinally compress the porous member to expand the porous member generally radially outward and decrease an overall longitudinal length of the implant.

13. The dental bone implant of claim **12**, in which the coronal member includes an apically accessible bore, and the core is configured to adjustably engage the apically accessible bore.

14. The dental bone implant of claim **13**, in which the core and the apically accessible bore comprise complementary threads.

15. The dental bone implant of claim **12**, in which the core has a non-circular outer surface, and in which rotation of the core causes the porous member to expand radially outward.

16. The dental bone implant of claim **12**, in which the core has a coronal portion with an outer diameter larger than an inner diameter of the porous material, in which the core tapers inwardly as it extends apically, and in which the core is adjustable in the longitudinal direction so that the coronal portion of the core expands the porous member generally radially outward.

17. The dental bone implant of claim **12**, in which the coronal member comprises a smooth exterior surface.

18. The dental bone implant of claim **12**, in which the apical member comprises a smooth exterior surface.

19. The dental bone implant of claim **12**, in which the porous member material comprises a porous metal.

20. The dental bone implant of claim **12**, in which the porous member material comprises tantalum.

21. The dental bone implant of claim **12**, in which the coronal member further includes a coronally accessible cavity sized to receive a portion of a driving tool.

22. The dental bone implant of claim **12**, in which the porous member comprises a wall having a thickness of approximately 0.020 to 0.040 inches.

23. A bone implant comprising:

a coronal member formed of a relatively rigid coronal member material and defining an apical end surface, the coronal member including an apically accessible bore;

an apical member formed of a relatively rigid apical member material and defining a ledge, the apical member configured to adjustably engage the coronal member to define a space between the apical end surface and the ledge, the apical member including a core configured to be apically received by the bore so as to define a core receiving zone disposed between the core and the coronal member; and

a porous member formed of a relatively flexible porous member material that is at least partially porous, the porous member being disposed between the apical end surface of the coronal member and the ledge of the apical member, wherein adjusting the coronal member and the apical member toward each other longitudinally compresses the porous member and expands the porous member generally radially outward,